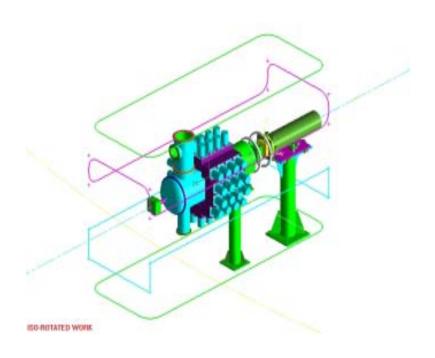
# Status of the NPDGamma Project



NPDGamma Collaboration Vancouver September, 28-29, 2002



# Goal of this collaboration meeting

- We start to have the beamline (cave is not a part of the beamline)
- We are finishing with the components of the experiment
- We need to have a plan to test their performance
- We need to start the integration

Schedule: baseline vs actual

Experiment	Baseline Start Date (mo/yr)	Actual/ Forecast Start Date (mo/yr)	Baseline Completion Date (mo/yr)	Actual/ Forecast Completion Date (mo/yr)	% Complete Baseline	% Complete Actual
Design	1/99	1/99	12/01	12/02	100	83
Procurement	1/99	1/99	1/03	1/03	84	49
Construction	7/00	7/00	6/03	6/03	60	29
Operation	-	-	-	-	-	-

Beamline	Baseline Start Date (mo/yr)	Actual/Forecast Start Date (mo/yr)	Baseline Completion Date (mo/yr)	Actual/Forecast Completion Date (mo/yr)	% Complete Baseline	% Complete Actual
Design	6/98	6/98	10/01	3/02	100	99
Procurement	12/98	12/98	3/02	12/02	100	91
Construction	1/01	1/01	12/02	2/03	100	84

#### Beamline Schedule: milestones

2.3.4.8	Chopper installed	3/02
2.3.5.2	Chopper commissioned	12/02
2.4.1.6	Conceptual design of integrated shielding	6/01
2.4.2.4	Integrated shielding design complete	10/01
2.4.3.8	Shielding procurement completed	2/02
2.4.4.2	Integrated shielding complete	2/02
2.5.2.9	Floor and wall penetrations designed	9/01
2.5.3.1.5	Guide ordered	4/01
2.5.3.9	Guide fabrication inspection	1/02
2.5.3.1.5	Guide delivered	3/02
2.5.3.11	Guide support and penetrations completed	12/01
2.5.4.7	Guide installation completed	4/02
2.6.2.3	Plans for ER1 modifications complete	9/01
2.6.4.3	ER1 modifications complete	12/01
2.7	End of Beamline Construction	12/02

# **Experiment Schedule: milestones**

1.1.4.5	One signal channel working	8/02
1.2.5.1	DAQ commissioned	12/02
1.3.3.6.1	Detector procurement complete	7/02
1.3.5.2	Detector complete	1/03
1.4.4.5.5	Construction and testing of additional sealed cells completed	5/02
1.4.4.23	Polarizer completed	12/02
1.6.3.9	Guide field procurement complete	6/02
1.6.4.7	Guide field complete	11/02
1.7.3.20	Target procurement done	10/02
1.7.4.5	Target testing in Indiana completed	8/02
1.7.4.15	Target testing complete	5/03
1.7.4.15.2	Target installation complete	4/03
1.7.5.3	Target complete	6/03
1.8.4.7	Back monitor ready	8/02
1.8.5.2	Monitors complete	12/02
1.9.4.9	ER2 shielding installation started	5/02
1.9.4.8	Cave completed	11/02
1.10.4.3	Utilities completed	10/02
1.11	End of Experiment Construction	6/03

#### Schedule: issues

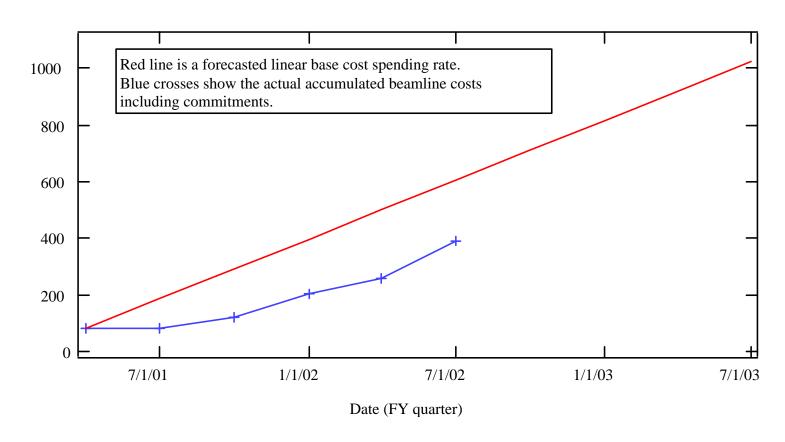
- In general, our the projects have performed well
- BUT:
- <u>Experiment:</u>
  - Schedule is tight for the rest of the project!!!!
  - Schedule is dominated by the readiness of the cave ???
- Beamline:
  - Schedule is dominated by the facility, we need beam off to install the guide and chopper
  - The plan was to have the guide out from ER1 to ER2 and the chopper in place
  - As soon as beam will go off in January 26th we will start to complete beamline
- We have promised to DOE a new baseline but we have to have first the solution to the cave magnetic shielding problem

# Budget Status: Experiment - DOE capital

		Costed	Estimate	Total	Available	% of
WBS	Element	&	То	Base	Contingency	Total
		Committed	Complete	Cost		Base Cost
1.1	Signal Electronics	5	35	40	11	28%
1.2	Data Processing	19	53	72	6	8%
1.3	Detector	130	31	161	13	8%
1.4	3He Polarizer	5	12	17	2	12%
1.5	Spin Flipper	14	8	18	3	17%
1.7	LH2 Target	83	5	88	31	35%
1.9	Cave	104	467	544	154	28%
1.1	ER2 Utilities	30	64	93	14	15%
1.11	Commissioning	0	11	11	6	55%
	Totals	390	686	1044	240	23%

LANL: \$448k

## Budget Status: Experiment cont.



Issues: Budget is tight

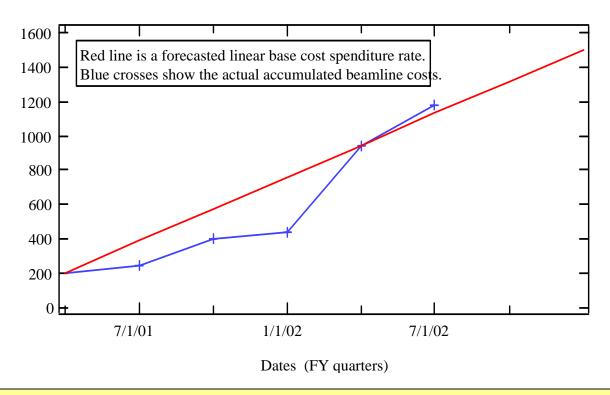
- cave
- target
- polarizer
- utilities

# Budget Status: Beamline - DOE capital

WBS	Elem e nt	Cost ed & Committe d	Est imate to Comp let e	Total Base Cost	Available Contingency	% of Total Base Cost
2.1	In-Pile	94	0	82	9	11%
2.2	Shutter	196	3	159	4	3%
2.3	Chopper	97	0	87	1	1 %
	Integrated Shielding	350	162	477	98	21%
2.5	Neutron Guide	691	60	750	50	7 %
2.6	ER1 Utilities	23	29	49	19	39%
2.7	Commissioning	0	14	14	7	50%
		1 4 5 1	268	1618	188	15%

LANL: \$482k

## Budget Status: Beamline cont.



Issues: Several work packages almost completed!!!
Still budget tight for

- integrated shielding we need to go back and open/close the shielding for guide and chopper
- chopper

Prediction: We will use all our money - the cave has a overrun!

### Coming DOE Review

Date: November 5-7-2002 1.5 day per project

This is a status/progress/completion review by DOE

#### **Review Committee**

- Wilkerson/ UW
- Nico/ NIST
- Holt/Argonne
- Spinka/ Argonne
- Gould/NCSU
- Cianciolo/ORNL

2 weeks before the review (by Oct-18) we need to send a package to the Committee:

- 10-15 page summary
  - Status of projects
  - Future plans
  - Commissioning
  - Experimental program
  - Layout of operational plans
- Updated Management Plan
- Updated budget stuff
- Updated baseline schedule

# Reporting by Work packages

- In general, the reporting is functioning
- New reports due Oct-11

I need to do the 4th quarterly report to DOE